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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/717,566	11/21/2003	Herman Philip Godfried	245837US2	8463
22850	7590	02/04/2009		
OBLON, SPIVAK, MCCLELLAND MAIER & NEUSTADT, P.C. 1940 DUKE STREET ALEXANDRIA, VA 22314			EXAMINER HENDRICKSON, STUART L	
			ART UNIT 1793	PAPER NUMBER
			NOTIFICATION DATE 02/04/2009	DELIVERY MODE ELECTRONIC

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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### Office Action Summary

**Application No.**

10/717,566

**Applicant(s)**

GODFRIED ET AL.

**Examiner**

Stuart Hendrickson

**Art Unit**

1793

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 21 November 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-77 is/are pending in the application.
- 4a) Of the above claim(s) 56 and 62-74 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-55, 57-61, 75-77 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/S508)  
Paper No(s)/Mail Date 11/21/08, 12/29/08
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

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The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action. The RCE filed 11/21/08 is accepted.

Claims 1-55, 57-61, 75-77 are rejected under 35 U.S.C. 102(e) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Linares et al. 6582513.

The reference teaches highly pure and perfect CVD diamond- see col. 3 for example. Even though the properties are not reported, they are deemed possessed by the reference since the description of purity comports with the specification.

Claims 1-55, 57-61, 75-77 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Vichr et al. 5443032.

The reference teaches highly pure and perfect CVD diamond- see col. 10 line 55 for example. Even though the properties are not reported, they are deemed possessed by the reference since the description of purity comports with the specification.

The above references are taken to be representative of the high-purity diamond art. Hence, other references of interest are not applied in order to avoid duplication of rejection.

Claims 1-51, 53-55, 57-61, 75-77 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over JP 7-277890.

The portion provided teaches high quality diamonds with low nitrogen content. As above, no differences are seen. Concerning claim 35, the area is 'not given'.

Claims 1-51, 53-55, 57-61, 75-77 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Michler article.

The reference teaches, especially on pg. 188-190, excellent crystallinity and no long-range defects. The nitrogen content is not reported, however it is deemed possessed since the claims recite low levels of nitrogen impurity consistent with excellent grain diamond.

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The arguments filed 11/21/08 have been fully considered but they are not persuasive.

Previous arguments are incorporated herein. The Declaration is not persuasive since while phrases such as 'excellent', 'highly pure' etc. are subjective, the arguments overlook the fact that the PTO does not have a laboratory, and must rely upon the references themselves. It is clear from the claims and specification that the present invention is to a high quality material so the teachings of the references are sufficient to shift the burden to applicant to show a difference in the properties (one can only speculate as to the response which would have been filed if the applied references had said 'we make a low quality, high impurity diamond'). Paragraph 20 is noted; it would appear that the first sentence was well known prior to applicant's work. The key is actually making a diamond with really low birefringence. The nitrogen content argument is not persuasive, mainly because most claims are silent as to the value, some claims put an upper limit on the N content and some claims put a lower limit on the value. Therefore, the criticality is not seen or claimed in all embodiments, and paragraph 20 does not identify any particular ideal values. The isotope ratio of Linares is not seen to be relevant; if a ratio is implied then it should be stated (in a Declaration) on the record. It is believed that one of ordinary skill can make a low N content diamond; simply restrict the N content of the sources (and/or use getters). If a high-pure gas source has too much N, then use an ultra-high pure source. Declaration paragraph 31 is unclear and not accepted, in view of the claims of Linares. It is not necessary for Linares to have anticipated the problems of applicant. Concerning paragraph 36, most claims do not recite N content and claims 57-58 read upon zero nitrogen. Paragraph 37 should be demonstrated; indeed, the applicant should make a showing of the properties of the prior art diamonds since the references are sufficient to require this shift of burden.

Any inquiry concerning this communication should be directed to examiner Hendrickson at telephone number (571) 272-1351.

/Stuart Hendrickson/  
examiner Art Unit 1793